

WHAT IS CLAIMED IS:

1. A trocar system which comprises:

a cannula forming an opening longitudinally therethrough and having a proximally facing surface disposed near a proximal end thereof; and

5 an obturator assembly being at least partially insertable through the cannula and including:

a housing disposed at a proximal end, the housing including a base portion having a distally facing end surface configured and dimensioned to facilitate close proximate positioning thereof with the proximally facing surface of the cannula;

a penetrating tip disposed at a distal end;

an elongated shield including a guard extending from a shaft, the penetrating tip and guard being movable relative one another; and

10 a latch mechanism disposed generally within the housing, which facilitates changing the configuration of the obturator assembly between a fixed-shield orientation, wherein at least a portion of the guard is maintained to extend at least partially distal of the penetrating tip to prevent puncturing of tissue by the penetrating tip, to a non-fixed shield orientation whereby upon application of force to the distal end of the obturator assembly, the guard and penetrating tip are permitted to move relative one another to facilitate puncturing of tissue by the penetrating tip, the latch mechanism including:

a release member having a button portion and a camming surface; and

25 a latch operatively associated with the release member, the latch having a blocking surface and a mating surface, the mating surface cooperating with the camming surface of the release member such that upon movement of the release member the camming surface biases the mating surface to move the latch such

that the blocking surface permits axial movement of the shield.

2. A trocar system as recited in claim 1 wherein movement of the release member causes the blocking surface to be displaced out of axial alignment with the shield.

5 3. A trocar system as recited in claim 1 wherein the button portion protrudes at least partially through an opening formed in the distally facing end surface of the obturator housing.

10 4. A trocar system as recited in claim 1 wherein the latch is biased such that the blocking surface is normally disposed in axial alignment with at least a portion of the shield to prevent axial movement thereof.

5. A trocar system as recited in claim 2 wherein the blocking surface is disposed proximal of the at least a portion of the shield.

15 6. A trocar system as recited in claim 1 wherein the release member is configured and dimensioned such that axial movement of the release member imparts lateral movement of the blocking surface of the latch member.

7. A trocar system as recited in claim 1 wherein the obturator includes a shaft fixed relative to the housing and the penetrating tip is a flat knife blade secured to the shaft.

20 8. A trocar system as recited in claim 1 wherein the shield includes an extended surface which is disposed on the shield such that upon axial movement of the shield, the extended surface biases the actuator member away from the latch to permit the latch to return to its original orientation.

9. A trocar system as recited in claim 1 wherein the guard is configured and dimensioned to completely enclose the penetrating tip.

25 10. A trocar system as recited in claim 1, wherein the shield and guard are separate elements fitted together during assembly of the obturator.

11. A method of inserting a trocar assembly into a patient comprising the steps of:

approximating an obturator assembly with a cannula assembly such that a button portion of a release member is urged proximally and a camming surface of the release member imparts lateral movement of a blocking surface of a latch such that the blocking surface is moved to permit relative movement of the shield and a penetrating tip of the obturator assembly; and

inserting the trocar assembly through the body wall of a patient by pushing the trocar assembly toward the body wall such that a guard of the shield is urged proximally to reveal the penetrating tip and permit passage of the trocar assembly through the body wall.

12. A method of inserting a trocar assembly as recited in claim 11 wherein lateral movement of the blocking member moves the blocking member out of axial alignment with the shield.

13. A method of inserting a trocar assembly as recited in claim 11, further including the step of resetting the shield to a fixed orientation distal of the penetrating tip upon passage of the penetrating tip through the body wall and into a cavity of the patient's body, such resetting being facilitated by axial movement of the shield and resilient bias of the latch to a position wherein the blocking surface is axially aligned with at least a portion of the shield.